

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/750,623
Filing Date	December 31, 2003
First Named Inventor	Sue K. DeNise
Art Unit	1637
Examiner Name	David C. Thomas
Attorney Docket Number	MMI-0103 (14972.105005)

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	AA	US-6,103,446	08/15/2000		
	AB	US- 2003/0129609 A1	07/10/2003		
	AC	US- 2003/0104424 A1	06/05/2003		
	AD	US- 2003/0190644 A1	10/09/2003		
	AE	US- 6,218,119	04/17/2001		
	AF	US- 2002/0123058 A1	09/05/2002		
	AG	US- 2002/0137139 A1	09/26/2002		
	AH	US- 2002/0137160 A1	09/26/2002		
	AI	US- 2002/0119442 A1	08/29/2002		
	AJ	US- 2002/0107211 A1	08/08/2002		
	AK	US- 6,458,531	10/01/2002		
	AL	US- 6,701,869	03/09/2004		
	AM	US- 2003/0219819 A1	11/27/2003		
	AN	US- 6,363,751 B1	05/07/2002		
	AO	US- 5,582,967	12/10/1996		
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	† ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
	AP	WO02/076190 A2	10/03/2002			
	AQ	WO02/09510 A2	07/02/2002			
	AR	WO02/072871 A2	09/19/2002			
	AS	WO01/21801 A1	03/29/2001			
	AT	WO02/40709 A2	05/23/2002			
	AU	WO02/059374 A1	08/01/2002			

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	4
-------	---	----	---

Complete if Known

Application Number	10/750,623
Filing Date	December 31, 2003
First Named Inventor	Sue K. DeNise
Art Unit	1637
Examiner Name	David C. Thomas
Attorney Docket Number	MMI-0103 (14972.105005)

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER include only references considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 3 of 4

Complete if Known

Application Number	10/750,623
Filing Date	December 31, 2003
First Named Inventor	Sue K. DeNise
Art Unit	1637
Examiner Name	David C. Thomas
Attorney Docket Number	MMI-0103 (14972.105005)

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	ZHANG, H.M., et al., "Rapid Communication: A Novel DNA Polymorphism of the Bovine Calpain Gene Detected by PCR-RFLP Analysis", J. Anim. Sci. 1996; 74:1441	
	CB	DAVIS, G.P., et al., "The Impact of Genetic Markers on Selection", J. Anim. Sci. 1998, 76:2331-2339	
	CC	DENISE, S.K., et al., "Genetic Parameter Estimates for Postweaning Traits of Beef Cattle in a Stressful Environment", J. Anim. Sci. 1989, 67:2619-2626	
	CD	DU, F.X., et al., "Heterozygosity for Genes Influencing a Quantitative Trait", J. Anim. Sci. 2002, 80:1478-1488	
	CE	UNANIAN, M.M., et al., "Rapid Communication: Polymerase Chain Reaction-Restriction Fragment Length Polymorphism in the Bovine Growth Hormone Gene", J. Anim. Sci. 1994, 72:2203	
	CF	ZHANG, H.M., et al., "Rapid Communication: Polymerase Chain Reaction-Restriction Fragment Length Polymorphism Analysis of the Bovine Somatotropin Gene", J. Anim. Sci. 1993, 71:2276	
	CG	ZHANG, H.M., et al., "Rapid Communication: Diallelic Single-Stranded Conformational Polymorphism Detected in the Bovine Prolactin Gene", J. Anim. Sci. 1994, 72:256	
	CH	AX, R.L., et al., "New developments in managing the bull: Factors Affecting Calf Corp: Biotechnology of Reproduction", CRC Press, 2001.	
	CI	DENISE, S.K., et al., "Genetic Technologies: Factors Affecting Calf Corp: Biotechnology of Reproduction", CRC Press, 2002	
	CJ	DENISE, R.S.K., et al., "Genetic and environmental aspects of the growth curve parameters in beef cows", J. Anim. Sci. 1985, 61:1431	
	CK	DENISE, R.S.K., et al., "Relationships among postweaning weights and gains of cattle raised under range and gain test environments", J. Anim. Sci. 1987, 64:969	
	CL	DENISE, R.S.K., et al., "Relationships among udder shape, udder capacity, cow longevity and calf weights", J. Anim. Sci. 1987, 65:366	
	CM	TANIDA, H., et al., "Genetic aspects of longevity in Angus and Hereford cows", J. Anim. Sci. 1988, 66:640	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.96. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 4 of 4

Complete if Known

Application Number	10/750,623
Filing Date	December 31, 2003
First Named Inventor	Sue K. DeNise
Art Unit	1637
Examiner Name	David C. Thomas
Attorney Docket Number	MMI-0103 (14972.105005)

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	DA	ZHANG, H.M., et al., "Nucleotide sequence determination of a bovine somatotropin allele", An. Genetics, 1992, 23:578	
	DB	LAGZIEL, A., et al., "Geographic and breed distribution of an MspI PCR-RFLP in the bovine growth hormone (bGH) gene", Anim. Genet. 2000, 31:210-213	
	DC	DENISE, S.K., et al., "The use of genetic markers in dairy and beef cattle improvement: Proc. Southwest Nutr. And Manage", Conf., Tempe, AZ 1993	
	DD	DENISE, S.K., et al., "Genetic screening for disease and production: Proc. Western Canadian Dairy Sem.", Red Deer, Alberta 1993	
	DE	DENISE, S.K., et al., "Incorporation of molecular genetic information into genetic prediction models: Proc. Genetic Prediction Workshop, Beef Improvement Federation", Kansas City, Jan. 1994	
	DF	DENISE, S.K., et al., "Gene mapping, marker-assisted selection, QTLs-Boiling it down to cowboy lingo. Proc. Beef Improvement Federation Annual Meeting", Des Moines, Iowa, June 1994	
	DG	DENISE, S.K., "Biotechnology and Animal Breeding: What can we use today and what does the future hold?" Great Plains Beef Cattle Handbook 1994	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.